

Patent Claims

1. A jaw implant having an implant body and an implant top portion (13) which is attached to the implant body (10) by a screw (14) and serves as a carrier for a dental prosthesis and has a borehole which surrounds a through-borehole (15) for the connecting screw (14) and a recess (16) with a supporting area for the screw head (17),
characterized in that
the supporting area is designed as a truncated cone (18) surrounding the through-borehole (15) and the part of the screw head (17), which comes to rest against the truncated cone, is designed as a female taper (19) adapted to the truncated cone, and the truncated cone and the female taper cause a centering of the implant top portion (13) on the implant body (10) when the screw is tightened and at the same time prevent deformation of the implant top portion toward the outside.
2. The jaw implant according to claim 1, characterized in that the interface between the implant body (10) and the implant top portion (13) has an implant head (11) running at a right angle to the longitudinal axis of the implant body.
3. The jaw implant according to claim 1, characterized in that the interface between the implant body (20) and the implant top (24) has a profile adapted to the comb shape of the jaw.
4. The jaw implant according to claim 3, characterized in that the profile is inclined toward the buccal side and the lingual side.
5. The jaw implant according to claim 3, characterized in that the profile toward the buccal side and the lingual side is rounded, conforming to the shape of the cross section of the jaw.

6. The jaw implant according to claim 3, characterized in that the profile toward the buccal side and the lingual side has a bell shape (67, 68, 71, 72) approximating the shape of the cross section of the jaw.
7. The jaw implant according to claim 3, characterized in that the implant top (34) is elastically deformable under the pressure of the tightened screw (35) in the interface area.
8. The jaw implant according to claim 7, characterized in that in the interface area, the implant top (34) has a profile (32) which is adapted to the profile of the implant body (31) under the pressure of the screw (35).
9. The jaw implant according to claims 7 and 8, characterized in that the implant top (34), which undergoes elastic deformation in the interface area under the pressure of the screw (35), exerts a restoring force on the screw which secures the screw in the tightened state to prevent it from loosening spontaneously.
10. The jaw implant according to any one of claims 7 through 9, characterized in that a groove (43) running in a ring shape around the supporting area (truncated cone 42) is arranged in the recess (44) in the implant top (41) and increases the elastic deformability of the implant top in the interface area.
11. The jaw implant according to claim 10, characterized in that the ring groove (43) has a profile on which one flank is formed by the conical surface of the truncated cone (42).
12. The jaw implant according to claims 8 and 9, characterized in that inclined faces (31) on the buccal side and on the lingual side in the interface area of the implant body (30) form an angle α which is larger than an angle α' between corresponding inclined surfaces (32) on the buccal side and on the lingual

- side in the interface area of the implant top (34); and the difference between angles α and α' is such that it is within the elastic deformability range of the implant top and angle α increases under the pressure of the screw (35) and is adapted to angle α' .
13. The jaw implant according to claims 8 and 9, characterized in that rounded surfaces (56) on the buccal side and the lingual side have smaller radii of curvature in the interface area of the implant top (54) than the corresponding rounded surfaces (53) on the buccal side and on the lingual side in the interface area of the implant body (50); and the difference in curvature is such that it is within the elastic deformability range of the implant top, and the curvature in the interface area of the implant top increases under the pressure of the screw (55) and is adapted to the curvature in the interface area of the implant body.
 14. The jaw implant according to claim 13, characterized in that the rounded surfaces (56) in the interface area of the implant top (54) and the rounded surfaces (53) in the interface area of the implant body (50) are circular.
 15. The jaw implant according to claims 8 and 9, characterized in that an approximately bell-shaped profile has smaller radii of curvature in the interface area of the implant top (70) in the concave part (72) than the corresponding convex part (67) of the approximately bell-shaped profile in the interface area of the implant body (65); and the difference in curvature is such that it is within the elastic deformability range of the implant top, and the curvature in the interface area of the implant top increases under the pressure of the screw (75) and is adapted to the curvature in the interface area of the implant body.
 16. The jaw implant according to claim 13, characterized in that the concave part (72) in the interface area of the implant top

portion (70) and the convex part (67) in the interface area of the implant body (65) are circular.